



use of open source and Free Software by third parties.

3. The Conservancy acts as a fiscal sponsor for many open source and Free Software projects. By joining the Conservancy, projects obtain the benefits of a formal legal structure while keeping themselves focused on software development. These benefits include, most notably, the ability to collect earmarked project donations and protection from personal liability for the developers of the project. Another benefit of joining the Conservancy is that projects can use it to hold assets, which are managed by the Conservancy on behalf of and at the direction of the project. The Conservancy is a tax-exempt 501(c)(3) organization, so member projects can receive tax-deductible donations to the extent allowed by law.

4. There is an open source software project known as BusyBox that is a member project of the Conservancy. BusyBox is considered open source because it is licensed to the public under the terms of a well known open source and Free Software license called the “GNU General Public License, Version 2” (“GPLv2”), which allows licensees to make unlimited copies, modifications and redistributions of BusyBox for no fee so long as the licensee (i) further distributes BusyBox only under the terms of the GPLv2 and (ii) provides its redistributees either the complete and corresponding source code for the version of BusyBox being distributed or a written offer for that complete and corresponding source code along with the distribution of BusyBox. Source code is the version of software that computer programmers alter to make improvements. It is not the version of software that operates machines. The version of software that operates machines is called object code, binary code, or, when referring to machines other than desktop/laptop computers, “firmware.”

5. Technologically, BusyBox is a single computer program that comprises a set of computing tools and optimizes them for computers with limited resources, such as cell phones, PDAs, and other small, specialized electronic devices. BusyBox is extremely customizable, fast, and flexible, and is used in countless products sold by many manufacturers all over the world. BusyBox makes many of the world's televisions, internet routers, cameras and other electronics devices run quickly, efficiently and at a low cost.

6. In addition to being the fiscal sponsor of its member projects, the Conservancy also serves as copyright enforcement agent for some owners of copyrights in the member projects. The Conservancy acts as copyright enforcement agent for Mr. Erik Andersen, the owner of copyright in significant portions of BusyBox. In this capacity, the Conservancy identifies users of open source software that may not be doing so in compliance with the applicable license terms. The Conservancy, with the assistance of legal counsel, then addresses those issues to help third parties ensure they are making appropriate use of open source software.

7. Software that is installed into an electronic device in order to operate the device is frequently referred to as "firmware." Firmware is software in object and/or binary code format, as source code itself does not have the capacity to operate machines. In connection with my work in open source and Free Software license monitoring, at some point in 2009, I conducted an investigation to determine whether Best Buy and Phoebe Micro were distributing the BusyBox program as part of the firmware for their consumer electronics products. In particular, I investigated Best Buy's Insignia brand Blu-ray DVD Disc Player products and Phoebe Micro's Airlink101 wireless router and camera products.

8. As part of my investigation of Best Buy, I downloaded a copy of the firmware for the Insignia Blu-ray Disc Player with model number NS-WBRDVD by visiting Best Buy's Insignia Products webpage at <http://insigniaproducts.com/products/dvd-players-recorders/NS-WBRDVD.html>. From that webpage, I downloaded the file located at [http://insigniaproducts.com/cms/software-updates/NS-WBRDVD/20091022\\_NS\\_WBRDVD\\_BBY\\_52\\_6902\\_22.iso](http://insigniaproducts.com/cms/software-updates/NS-WBRDVD/20091022_NS_WBRDVD_BBY_52_6902_22.iso), which was identified as the firmware for Best Buy's Insignia NS-WBRDVD product.

9. On 11 November 2009, I analyzed the 20091022\_NS\_WBRDVD\_BBY\_52\_6902\_22.iso firmware file and discovered that BusyBox was indeed present therein. In particular, I loopback mounted the .iso file, which contained a file called "images/squashfs-7601b0.img". That file is a squashfs filesystem, which, when opened with the unsquashfs utility, contains inside it a file called /bin/busybox. The file /bin/busybox is a binary version of BusyBox. Searching that binary version showed strings of characters that are unique to BusyBox, including the specific version number, identified as v1.2.1.

10. When I downloaded the Best Buy firmware, 20091022\_NS\_WBRDVD\_BBY\_52\_6902\_22.iso that contained BusyBox, there was no corresponding source code nor offer for corresponding source code for BusyBox provided therewith. There was also no notice that the file was licensed under the GPLv2 nor that I had any right to myself make unlimited copies, modifications and redistributions of the file for no fee.

11. On 26 January 2011, I downloaded a copy of the firmware for the Insignia Blu-ray Disc Player with model number NS-WBRDVD by visiting Best Buy's Insignia Products

webpage at <http://insigniaproducts.com/products/dvd-players-recorders/NS-WBRDVD.html>. From that webpage, I downloaded the file located at [http://insigniaproducts.com/cms/software-updates/NS-WBRDVD/20101222\\_NSWBRDVD\\_BBY\\_B052\\_109\\_34.iso](http://insigniaproducts.com/cms/software-updates/NS-WBRDVD/20101222_NSWBRDVD_BBY_B052_109_34.iso), which was identified as the "Firmware Update January 2011" for Best Buy's Insignia NS-WBRDVD product.

12. I analyzed the firmware file, 20101222\_NSWBRDVD\_BBY\_B052\_109\_34.iso, and discovered that BusyBox was indeed present therein. In particular, I loopback mounted the .iso file, which contained a file called "images/squashfs-7601b0.img". That file is a squashfs filesystem, which, when opened with the unsquashfs utility, contains inside it a file /bin/busybox. The file /bin/busybox is a binary version of BusyBox. Searching that binary version showed strings of characters that are unique to BusyBox, including the specific version number, identified as v1.2.1.

13. Best Buy provided candidate source code to Conservancy seven times, and each time, Conservancy has provided Best Buy with a detailed report outlining specific reasons why the source did not meet the requirements of complete and corresponding source code under GPLv2. Best Buy represented to Conservancy that these source candidates corresponded to all firmwares for all Insignia Blu Ray DVD players containing BusyBox. Conservancy disputed this representation. Best Buy, in response, released new firmwares for the NS-WBRDVD and NS-BRDVD3 specifically, but even with the new firmware release, the existing candidate source releases fail to correspond to the new firmwares. Best Buy has yet to provide source code candidates corresponding to Best Buy's Insignia NS-BRDVD, NS-BRDVD2, NS-BRDVD4, NS-

2BRDVD, NS-WBRDVD2, and NS-BDLIVE01 products.

14. On 31 August 2009, I downloaded a copy of the firmware for Phoebe Micro's Airlink101 AR670W firmware by visiting the Airlink101 Support webpage at <http://www.airlink101.com/support/index.php?cmd=files&id=130>. From that webpage, I downloaded the file located at [http://www.airlink101.com/support/index.php?cmd=files&\\_a=download&id=323](http://www.airlink101.com/support/index.php?cmd=files&_a=download&id=323), which was identified as "AR670W Firmware v1.01", the firmware for Phoebe Micro's Airlink101 AR670W product.

15. I analyzed the AR670W firmware file and discovered that BusyBox was indeed present therein. In particular, I opened the ZIP archive file, which contained a file called "ar670w\_v1.01\_892c.bin". Byte location 655488 of that file was a squashfs partition (a virtual filesystem). Inside that squashfs, I found a binary version of BusyBox. Searching that binary version showed strings of characters that are unique to BusyBox, including the specific version number, identified as v1.00.

16. When I downloaded the Phoebe Mirco firmware, ar670w\_v1.01\_892c.bin that contained BusyBox, there was no corresponding source code nor offer for corresponding source code for BusyBox provided therewith. There was also no notice that the file was licensed under the GPLv2 nor that I had any right to myself make unlimited copies, modifications and redistributions of the file for no fee.

17. On 31 August 2009, I downloaded a copy of the firmware for Phoebe Micro's Airlink101 AICAP650W firmware by visiting the Airlink101 Support webpage at <http://www.airlink101.com/support/index.php?cmd=files&id=81>. From that webpage, I

downloaded the file located at [http://www.airlink101.com/support/index.php?cmd=files&\\_a=download&id=214](http://www.airlink101.com/support/index.php?cmd=files&_a=download&id=214) which was identified as "AICAP650W FW 1.0.5", the firmware for Phoebe Micro's Airlink101 AICAP650W product.

18. I analyzed the AICAP650W firmware file and discovered that BusyBox was indeed present therein. In particular, I opened the ZIP archive file, which contained a file called "Firmware 1.0.5\_20070622/FW\_AICAP650\_1.0.5-35\_20070622.bin". Byte location 0 of that file was a gzip compressed sequence. When that sequence was uncompressed, byte location 2183168 of that sequence showed another gzip sequence, which was a gzip-compressed ramdisk (a virtual filesystem). Inside that ramdisk, I found a binary version of BusyBox. Searching that binary version showed strings of characters that are unique to BusyBox, including the specific version number, identified as v1.00-pre1.

19. On 26 January 2011, I downloaded a copy of the firmware for Phoebe Micro's Airlink101 ANAS350 firmware by visiting the Airlink101 Support webpage at <http://www.airlink101.com/download/anas350.php>. From that webpage, I downloaded the file located at [http://www.airlink101.com/support/index.php?cmd=files&\\_a=download&id=327](http://www.airlink101.com/support/index.php?cmd=files&_a=download&id=327), which was identified "ANAS350 Firmware v. 400a7 (.bin)", the firmware for Phoebe Micro's Airlink101 ANAS350 product.

20. I analyzed the ANAS350 firmware file and discovered that BusyBox was indeed present therein. In particular, I opened the ZIP archive file, which contained a file called "ANAS350\_400a7\_BIN.BIN". Byte location 1059729 of that file was a LZMA compressed sequence. When that sequence was uncompressed, it is an ext2 filesystem. Inside that filesystem,

I found a binary version of BusyBox. Searching that binary version showed strings of characters that are unique to BusyBox, including the specific version number, identified as v1.00-rc2.

21. At <http://www.airlink101.com/download/anas350.php>, there is a link labeled "GPL Code". However, upon following that link, there is no source nor offer for source code found for the ANAS350 firmware. There was also no notice that the ANAS350 firmware file in particular was licensed under the GPLv2 or that I had any right to myself make unlimited copies, modifications and redistributions of the file for no fee.

22. On 26 January 2011, I downloaded a copy of the firmware for Phoebe Micro's Airlink101 AR360W3G firmware by visiting the Airlink101 Support webpage at <http://www.airlink101.com/download/ar360w3g.php>. From that webpage, I downloaded the file located at [http://www.airlink101.com/support/index.php?cmd=files&\\_a=download&id=278](http://www.airlink101.com/support/index.php?cmd=files&_a=download&id=278), which was identified "AR360W3G Firmware Upgrade R7.00b5", the firmware for Phoebe Micro's Airlink101 AR360W3G product.


23. I analyzed the AR360W3G firmware file and discovered that BusyBox was indeed present therein. In particular, I opened the ZIP archive file, which contained a file called "20080212\_AR360W3G\_R700b5.EXE". Byte location 1694121 of that file was a gzip compressed sequence. When that sequence was uncompressed, it is an ext2 filesystem. Inside that filesystem, I found a binary version of BusyBox. Searching that binary version showed strings of characters that are unique to BusyBox, including the specific version number, identified as v1.00-rc2.

24. At <http://www.airlink101.com/download/ar360w3g.php>, there is a link labeled "GPL



Code". However, upon following that link, there is no source nor offer source code found for the AR360W3G firmware. There was also no notice that the AR360W3G firmware file was licensed under the GPLv2 or that I had any right to myself make unlimited copies, modifications and redistributions of the file for no fee.

I declare under penalty of perjury that the forgoing is true and correct.

  
Bradley M. Kuhn

Executed on January 26, 2011  
New York, New York